

Two new centipedes from southern Africa

by

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A new species of *Rhysida* is described from North Moçambique and a new subspecies of *Cormocephalus pseudopunctatus* from Kranskop, Natal.

A list of differential characters is given for the widespread and common centipede *Cormocephalus nitidus*, when comparing large adult forms with what are believed to be juvenile or half grown specimens of this species collected near Grahamstown.

Genus *Rhysida* Wood

Rhysida anodonta n.sp.

Holotype 1 ♀, *paratype* 1 ♀, Mituwe Mts., North Moçambique, collected D. G. Bradley, November 1964 (Natal Museum No. 9336).

Colour after preservation in alcohol: tergites slate grey but head and first two segments with parts of the third light yellow brown; toxicognaths, light yellow brown, legs very pale green; the fine, fur-like hair covering of the antennae giving them a pale golden colour.

Antennae with 16 segments, very long, reaching back almost to the posterior margin of tergite V, the two basal and $\frac{1}{4}$ — $\frac{1}{3}$ of the third segments, hairless.

Toxicognaths. The coxal plate distinctly wider than high, no spinose seta in the middle (as in *afra*), the distal margin with 4 distinct and separate teeth.

Tergites. Paramedian sutures beginning on tergite V or VI, distinct from VII backwards, posterior segments with very fine weak granulation, the granules well separated; about 5 very low indistinct keels, defined by a row of very small granules. Lateral emargination on the last 10 or 11 tergites.

Sternites entirely without sutures, a pair of very low indistinct depressions in each segment, rounded and large; last sternite about as wide as long, strongly narrowed posteriorly, the posterior margin straight, the postero-lateral angles rounded.

Legs. Coxopleurae of end legs with blunt rounded apical process, completely without spines, these also absent from lateral margin; lateral margin of porose area sinuous, curved strongly inward, the area reaching backward far beyond the posterior margin of last sternite; all segments of end-legs without spines, all legs with 2 distinct claw spurs, 2 tarsal spurs on legs I–XIX, 1 on XX, none on end-legs.

Dimensions: Total length 65 mm., end-legs 14.5 mm. The species differs markedly from all the species of *Rhysida* in southern Africa from which it can be distinguished by at least the complete absence of spines on the coxopleural process and in having the two basal segments of antennae and a very small basal portion of the third one hairless instead of the usual three smooth segments.

In Attems' key it appears to have as much or more in common with the South American species *R. citeris* (Humb. & Sauss.) than with the East African ones, *stuhlmanni* Kraepelin and *afra* (Peters) from these two species it differs in having a large number of posterior tergites

with lateral emargination instead of only the last one; in the sternites being without even short sutures; in the prefemur being quite unarmed; in the tergites, especially of the posterior half, being roughened with minute scattered granules, not shiny; in having only 16 antennal segments instead of 17 or 18 and in having the last sternite strongly narrowed posteriorly; it further differs from *afra* according to Attems figure (1929, p. 196, fig. 246) in having no spines on the toothplates of the toxicognath.

In most of these characters it also differs from *R. intermedia* Attems, described from "Nordpemba" (? = north of Pemba Bay, Moçambique).

Genus *Cormocephalus*

Cormocephalus pseudopunctatus bisulcatus subsp. n.

Holotype, 1 ♀, Kranskop, Natal, collected by B. Lamoral, August, 1967.

The subspecies agrees with the typical form in most respects; the head and first segment are larger, with fewer punctures, giving them a smooth shiny appearance.

Colour. Dull green throughout.

Antennae with the 3 basal segments hairless; toothplate of toxicognaths with few and weak punctures, 3 teeth on its distal margin, the inner on each side large and bifid.

Tergites. The main difference from *pseudopunctatus* lies in the two very distinct sulci on the headplate and first tergite occupying most of their length but not quite reaching the posterior margin; tergites II to VI without, VII with distinct sulci in its anterior half only; VIII backwards with complete deep sulci, the last tergite however without a median sulcus. Lateral emargination beginning on segment XII. Sternites as in *pseudopunctatus*.

Legs. End-legs with 6 ventro-lateral spines on prefemur arranged in two rows of 3, ventro-median surface with 4 or 5, 2 small dorso-median spines in addition to the edge-spine. All legs with claw-spurs.

Dimensions. Total length 41 mm.

Cormocephalus nitidus Porath.

C. nitidus Porath 1872, Öfvers. Vet. Ak. Förh., 28, p. 1154.

The genus *Cormocephalus* is in general composed of centipedes of small to moderate size; *C. nitidus* is however an exception for of approximately 29 species found in southern Africa, *nitidus* is by far the largest; this robust species may be as much as 104 mm. (4.2 inches) in total length, rivalling in size the two largest South African centipedes, *Scolopendra morsitans* and *Ethmostigmus trigonopodus*, 120 mm. and 130 mm. in length respectively.

The species is widespread throughout southern Africa with a vertical distribution from sea-level to an altitude of about 6,000 feet. Attems described a subspecific form *nitidus calvus* from Knysna differing from the type in the number of hairless basal segments of the antennae but it is very doubtful whether this form can be maintained as a separate taxon.

The colour of the largest examples is in general a terra-cotta or brick-red throughout, resembling that of *Alipes crotalus* in Natal and the Transvaal. It appears to be the only South African centipede to give off a foetid odour when irritated, this observation being due to Dr. Anne Alexander of Rhodes University.

At Grahamstown and other localities numerous smaller specimens up to 45 mm. in length have been captured under stones; they differ markedly from the large typical form in colour and appear at first sight to belong to a quite different species; in a number of small characters however they differ far less and all these differences are probably characteristic of the earlier growth stages, disappearing at later ecdyses as the centipede approaches maturity.

The Albany Museum collections contain many large specimens of *nitidus* but in order to make certain of identification it was considered advisable to compare the type of *nitidus* with local material. Due to the good offices of Professor Per Brinck of Lund University and the Director of the Naturhistorisk Museet in Stockholm, the writer was enabled to examine Porath's type specimen of 1872 and to compare it with a specimen from East London of almost precisely the same size (84 mm.) in the collection of the Museum; the type is in a very good state of preservation, only the colouring having faded, and the two forms showed detailed agreement in all the characters described by Porath.

The differences between the large typical form and the blue-green half grown specimens found near Grahamstown (Howison's Poort) are shown in the following table:

Cormocephalus nitidus Porath
(84 mm. in length).

Blue-green specimens
(40-45 mm. in length).

Colour usually terra-cotta or bright brick-red throughout. Somewhat smaller specimens, presumably adult, are bronze green, the head, first two and last segments reddish brown; legs reddish, lighter than body.

Colour blue-green throughout; head a little darker, legs a little lighter.

Tooth-plates of toxicognath with 4 distinct, equally spaced teeth.

The outer tooth of tooth-plate distinctly removed from the others which are fused to form a plate with 3 small tooth-like projections; sometimes only 3 distinct teeth.

Stigma of segment III very large, half or only a little less than length of segment; twice as large as stigma of V.

Stigma of segment III at most a fourth to a third length of segment; not twice as large as stigma of V.

Last sternite with a large median depression.

Last sternite without a sulcus or depression.

Process of coxopleurae short, triangular; porose area far surpassing posterior margin of last sternite.

Process of coxopleurae long, cylindrical; porose area not surpassing posterior margin of last sternite by much.